



CATALOG SHEET

913 SERIES ILLUMINATED PUSH BUTTON SWITCH

NEW!

For computer, data processing
and automation applications!

Switch Ratings	S.P.S.T. Double break, N.O., N.C.; S.P.D.T. Double break, Two Circuit (one N.O., one N.C.)
	0.1 amp, 125V AC
	0.1 amp, 30V DC (non-inductive)
Operating Force	10 ozs. (approx.)
Button Travel	5/64" (approx.)
Life	1,000,000 operations (approx.)

The 913 Series Illuminated Push Button Switch has light action and requires short travel. The circuit is completed by a moving, flexible, bridging member meeting two stationary contacts. All contact parts are gold plated, assuring excellent contact with light pressure. This series is recommended for use with low current at higher voltages . . . or for dry circuits.

Illumination of the transparent push button is obtained from a T-2 Neon Lamp. The Neon lamp may be the high brightness NE-2H or the standard brightness NE-2E.

Lamp NE-2E is suitable for operation on DC circuits of 105-125 volts. Lamp NE-2H is recommended for 110-125V AC circuits where the lighting level must be higher. On equal life basis, the NE-2H lamp gives about ten times as much light as the NE-2E.

The integral resistor may or may not be included in the switch housing. If omitted, the necessary current-limiting resistor must be added externally. The following values are used internally and are recommended for external use. All values are for 110-125V circuit range.

NE-2E	100K - 10,000 hours minimum
NE-2H	33K - 20,000 hours minimum

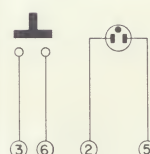
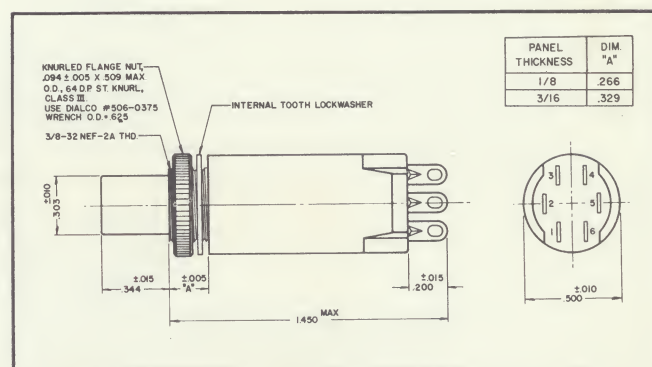
- **MOMENTARY CONTACT**
- **NORMALLY OPEN; NORMALLY CLOSED; TWO CIRCUIT**
- **NEON LAMP—NON-REPLACEABLE; OR NON-ILLUMINATED**
- **INTEGRAL RESISTOR**
- **MOUNTS FROM BACK OF PANEL IN 3/8" CLEARANCE HOLE**



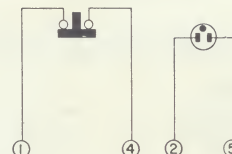
913-1436-1631-525
WITH LAMP



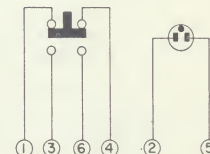
913-1227-1571-525
NO LAMP



S.P.S.T.
Normally Open



S.P.S.T.
Normally Closed



S.P.D.T.
One Normally Open,
One Normally Closed

(over)

(All illustrations are approx. actual size)

MATERIALS AND FINISHES

- **Push Button:** High strength plastic cap in a choice of up to 7 colors.
- **Mounting Bushing (base assembly):** Aluminum, black anodize finish; optional, clear anodize finish.
- **Insulation:** 1250V AC breakdown.
- **Hardware:** *Knurled flange nut—aluminum, black anodize finish; optional—clear anodize finish. Internal-tooth lockwasher—phosphor bronze, white nickel finish.
- **Terminals:** Soldering—brass, gold plated.

SWITCH CHARACTERISTICS

- **Momentary Action:** The switch mechanism is of the "momentary" type. As long as pressure is maintained on the button, the circuit change is maintained. The push action is smooth—only light pressure is required.
- **Circuits:** single circuit, normally open or closed; two circuit, one normally open, one normally closed.
- **Contact Parts:** gold plated.
- **Insulated:** The switch circuit is insulated from, and independent of, the lamp circuit.
- **Completely enclosed:** The switch action and contact parts are completely enclosed.

ORDERING INFORMATION

ILLUMINATED PUSH BUTTON SWITCHES

CATALOG NUMBER	SWITCH FORM	LAMP	RESISTOR VALUE
913-1151-1631-525	NORMALLY OPEN	NE-2E	NONE
913-1153-1631-525	NORMALLY OPEN	NE-2E	100K
913-1154-1631-525	NORMALLY OPEN	NE-2H	NONE
913-1156-1631-525	NORMALLY OPEN	NE-2H	33K
913-1425-1631-525	NORMALLY CLOSED	NE-2E	NONE
913-1427-1631-525	NORMALLY CLOSED	NE-2E	100K
913-1428-1631-525	NORMALLY CLOSED	NE-2H	NONE
913-1430-1631-525	NORMALLY CLOSED	NE-2H	33K
913-1431-1631-525	TWO CIRCUIT	NE-2E	NONE
913-1433-1631-525	TWO CIRCUIT	NE-2E	100K
913-1434-1631-525	TWO CIRCUIT	NE-2H	NONE
913-1436-1631-525	TWO CIRCUIT	NE-2H	33K

NON-ILLUMINATED PUSH BUTTON SWITCHES

CATALOG NUMBER	SWITCH FORM	LAMP	RESISTOR VALUE
913-1227-1570-525	NORMALLY OPEN	NONE	NONE
913-1442-1570-525	NORMALLY CLOSED	NONE	NONE
913-1443-1570-525	TWO CIRCUIT	NONE	NONE

LENS COLOR: The last digit in code block three designates lens color. Change this digit to obtain the desired color using the color code listings below:

Illuminated Switch
Cap Colors

1—red
3—yellow (amber)
5—white (translucent)
7—clear (colorless)
Example: 913-1430-1635-525

Non-Illuminated Switch
Cap Colors

0—black
1—red
2—green
3—amber
4—blue
5—white
6—yellow
Example: 913-1442-1574-525

HOW TO DESIGNATE THE 3 DIGIT CODE NUMBER SUFFIX (-XXX)

FINISH	PANEL THICKNESS	TERMINALS**
5—black anodize 6—clear anodize	2—1/8" 3—3/16"	5—soldering

Examples: 913-1154-1631-625 (clear anodize finish);
913-1425-1631-535 (3/16" panel thickness)

**This switch series is also available with printed circuit board terminals. Information will be furnished on request.

WRENCH



*Wrench for No-Mar Mounting: The threaded round knurled nut used on this switch has a precise knurl of this specification: 64 D.P. ST. Knurl, Class III. For your convenience, DIALCO 506-0375 Wrench is offered to permit secure fastening of 913 Series Switches on mounting panels.

ENGRAVED and FILLED LEGENDS

(Digits, Letters or Symbols on Flat End Cylindrical Lenses)

SIZE OF TYPE FOR LEGENDS

Number of Characters	Character Height Nearest Fraction
ONE	11/64"
TWO	7/64"
THREE	5/64"

Unless otherwise specified these standard sizes will be provided in a uniform manner per order—i.e., the size of type will be determined by the largest legend in each individual order.

Illuminated Switch Caps: Standard—BLACK; Optional—white, red or green can be supplied to order.

Non-illuminated Switch Caps: Standard—BLACK with amber, white or yellow lens caps; WHITE with black, red, green or blue lens caps. Optional colors—red, green or blue to order.

SWITCH CATALOG CHECK LIST

(Available free upon request)

L-169—Illuminated Push Button Switches: Mount in 1/2" clearance hole; incandescent or neon light sources.

L-173—922 Series Illuminated Push Button Switch: Mount in 3/8" clearance hole; incandescent light sources.